Ethernet Media Converter (Duplex Signal Mode)

User' Manual

1. Overview

The Converter complies with IEEE802.3 、 IEEE802.3u 、IEEE802.3x Standards. It is designed to convert data signal between 10/100 Base-Tx and 100 Base-Fx fast Ethernet. It supports 100BASE-TX, and 100BASE-FX applications. The data signal converted by such high performance media converter can be transmitted up to 100Km maximum by fiber-optic cable.

The Converter is equipped with two fiber optic connectors (for transmitting-Tx and the for receiving-Rx) and two RJ-45 Jacks and one external power supply receptacle. Six LED indicators are built-in for easy diagnosing and monitoring the status of power, Unshielded Twisted Paired (UTP) Link, UTP Activity, Fiber Link, Fiber Activity, Full duplex and data rates. It can be configured by the switch for Full Duplex or Half Duplex operation.

It is compact, cost-effective, low dissipative, high reliable and stable. It can be used in standalone applications, or Rack-Mounted applications where multiple media converter can be inserted into a rack-mount chassis, and allowing all the converters to be powered by a single internal power supply.

2. Specifications:

2.1 Performance Introduction (Table 1)

Table 1: Performance Introduction

Parameter	Type			
Data rate (Mbps)	100			
Optical wavelength (nm)	850	1310	1310	1550
Fiber type (nm)	62.5/125 Mulitmode	62.5/125 Multimode	9/125um Singlemode	9/125um Singlemode
Max Distance (Km)	5	5	20/40/60	100
Connector type	SC, ST			
Max distance(Km)	20、40、60	100		
Power supply	1A@5VDC±5%			
Operating temperature	0～70℃ (business class)			
	-20～80℃ (industrial grade)			
	-40～80℃ (enlarge industrial grade)			
Storage temperature	-40～80℃			
Relative humidity	5% to 90% non condensing			
Size	119mm X 71mm X 26mm OR consumer requirement			

2.2 Appearance (see Fig.2, Table2)

fig.2 Front view

Table 2.LED performance

LED	Color	**Function**
L/A-FX	Green	Lit when fiber connection is good Blink when fiber data is active
SPD-FX	Green	Lit when 100Mbps's fiber data is active
SPD-TP	Green	Lit when 100Mbps's TP data is active
L/A-TP	Green	Lit when TP connection is good, Blink when TP data is active
FDX	Green	Lit when full-duplex mode is active
PWR	Green	Lit when +5V power is coming up

3. DC Jack and AC-DC Power Adapter

The DC jack's central port is 3.5mm wide

AC-DC Power adapter

AC Input: 100～240VAC 50/60Hz

DC Output: 1A@+5VDC

4. Check list

Before you start installing the Converter, verify if the package contains the following:

---- The 100Base-Tx to 100Base-Fx Ethernet Media Converter

---- The AC-DC Power Adapter

---- This User's Manual

Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

5.Installing and configuring the Converter

5.1 For as a standalone unit:

5.1.1 Verify if the AC-DC adapter conforms to your country AC power requirement then insert the power plug

5.1.2 Check the type of UTP (see fig.3)

UTP complies with IEEE802.3 Standards, and has two type:T568A T568B.

G G O B B O P P O O G B B G P P

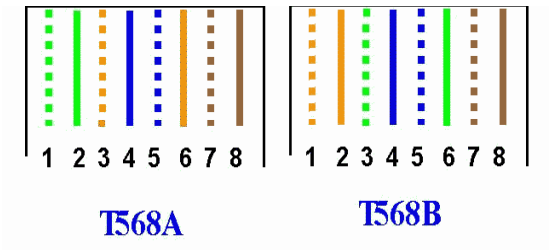


Fig.3 The type of UTP

NOTE: G: Green **O:** Orange **B:** Blue **P:** Palm

parallel cable: connect T568A to T568A , or T568B to T568B

crossing-over cable: connect T568A to T568B

5.1.3TP port list(Fig.4)

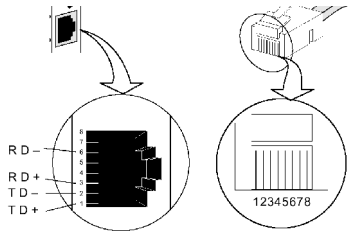
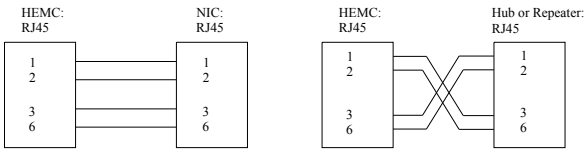


Fig.4 The RJ-45connector

5.1.4 Set Slide Switch. (See Fig.5)

a: Converter connect to Switch or Hub with parallel cable

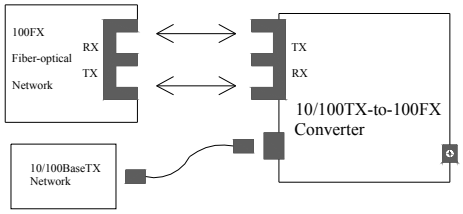
Converter connect to a workstation or NIC(Network Interface Card) with crossing-over cable



. parallel cable connected crossing-over cable connected

5.1.5Connect the media cable for network connection

(Fig.5)



5.1.6Turn on the converter power

5.2as a slide-in unit:

The slide-in Media Converter and Converter Rack should be supplied only from the same source, both Media Converter and Rack are built to match each other at dimensions, DC receptacle and power safety

Turn off the converter rack power

Ensure that there is no activity in the network

Locate +5VDC power jack on converter back, carefully slide in and plug go rack +5VDC power receptacle

Connect the media cable for network connection

Turn on the converter rack power, the Power LED will light up

6 NOTE:

6.1Attach the fiber cable. The Tx , Rx fiber cable must be paired at both ends.

6.2You must turn off power, then set the DIP-4 switch.

6.3Check the fiber cable and UTP which connect with Converter.